

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>N.90919B GCW</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/GB2005/000623</b>	International filing date (day/month/year) <b>18/02/2005</b>	(Earliest) Priority Date (day/month/year) <b>19/02/2004</b>
Applicant <b>F2G LTD</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 11 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (See Box II).

3. ☒ Unity of invention is lacking (see Box III).

**4. With regard to the title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regard to the drawings,**

- a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB2005/000623

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☒ contained in the international application as filed
    - ☐ filed together with the international application in computer readable form
    - ☒ furnished subsequently to this Authority for the purpose of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2005/000623

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, Sequence Search, BIOSIS, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE UniProt 'Online! 1 May 1999 (1999-05-01), "SPBC23G7.10c protein." XP002333610 retrieved from EBI accession no. UNIPROT:094467 Database accession no. 094467 the whole document	13
X	DATABASE Geneseq 'Online! 13 March 2001 (2001-03-13), "Aspergillus oryzae EST SEQ ID NO:4627." XP002333611 retrieved from EBI accession no. GSN:AAF12104 Database accession no. AAF12104 the whole document	13

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

28 June 2005

Date of mailing of the international search report

07. 10. 2005

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/025218 A (K.U.LEUVEN RESEARCH & DEVELOPMENT; LEMAIRE, KATLEEN; DE ROP, LARISSA;) 27 March 2003 (2003-03-27) abstract claim 7 page 5, line 1 - line 26	1,9,22, 23,25
A	US 5 240 940 A (ARNOLD ET AL) 31 August 1993 (1993-08-31) the whole document	
A	US 6 646 149 B1 (VERMEULIN NICOLAAS M. J ET AL) 11 November 2003 (2003-11-11) the whole document	
A	LIPSKY R H ET AL: "Characterization of a NADH:flavin oxidoreductase induced by cholic acid in a 7 alpha-dehydroxylating intestinal Eubacterium species." BIOCHIMICA ET BIOPHYSICA ACTA. 11 APR 1980, vol. 612, no. 2, 11 April 1980 (1980-04-11), pages 328-336, XP009049536 ISSN: 0006-3002 the whole document	
A	MATSUBARA T ET AL: "Purification, characterization, and overexpression of flavin reductase involved in dibenzothiophene desulfurization by Rhodococcus erythropolis D-1." APPLIED AND ENVIRONMENTAL MICROBIOLOGY. MAR 2001, vol. 67, no. 3, March 2001 (2001-03), pages 1179-1184, XP002333606 ISSN: 0099-2240 the whole document	
A	MOOSSAVI M ET AL: "Systemic antifungal therapy." DERMATOLOGIC CLINICS. JAN 2001, vol. 19, no. 1, January 2001 (2001-01), pages 35-52, XP009049533 ISSN: 0733-8635 the whole document	
A	RUSSELL A D ET AL: "Biocides: mechanisms of antifungal action and fungal resistance." SCIENCE PROGRESS. 1996, vol. 79 ( Pt 1), 1996, pages 27-48, XP009049522 ISSN: 0036-8504 the whole document	

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2005/000623

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	VANDEN BOSSCHE H ET AL: "Antifungal agents of use in animal health--chemical, biochemical and pharmacological aspects." JOURNAL OF VETERINARY PHARMACOLOGY AND THERAPEUTICS. FEB 2003, vol. 26, no. 1, February 2003 (2003-02), pages 5-29, XP002333609 ISSN: 0140-7783 the whole document -----	
A	DATABASE UniProt 'Online! 1 June 2003 (2003-06-01), "Related to NADH oxidase." XP002333612 retrieved from EBI accession no. UNIPROT:Q870W3 Database accession no. Q870W3 the whole document -----	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000623

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03025218	A	27-03-2003	NONE	
US 5240940	A	31-08-1993	NONE	
US 6646149	B1	11-11-2003	NONE	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2005/000623

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 10,21  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-25 (partly)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 10,21

Claim 10 refers to the products identified by the screening methods of claims 1 to 6, without, however, specifying any technical features of the products as such. The application fails to disclose a single product that has been identified by any of the methods of claims 1 to 6. The subject-matter of claim 10 lacks thus clarity (Art 6 PCT) to such an extent that no meaningful search can be carried out. The same objection applies to claims 21.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

## 1. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:3, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 2. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:8, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 3. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:12, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 4. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:14, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 5. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:19, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 6. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:24, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 7. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in SEQ ID NO:42, methods, uses, vectors, organisms, antibodies and methods of treatments relating to said protein.

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## 8. claims: 1-25(partly)

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

An isolated protein comprising the sequence as defined in  
SEQ ID NO:44, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 9. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:83, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 10. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:85, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 11. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:6, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 12. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:10, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 13. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:16, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 14. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:22, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 15. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:27, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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## 16. claims: 1-25(partly)

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

An isolated protein comprising the sequence as defined in  
SEQ ID NO:30, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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17. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:33, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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18. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:35, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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19. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:38, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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20. claims: 1-25(partly)

An isolated protein comprising the sequence as defined in  
SEQ ID NO:40, methods, uses, vectors, organisms, antibodies  
and methods of treatments relating to said protein.  
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